

## North American PHEV Demonstration

Fleet Summary Report: Hymotion Prius (V2Green data logger)

Number of vehicles: 121

Reporting Period: Apr 08 - Oct 09

All Trips Combined

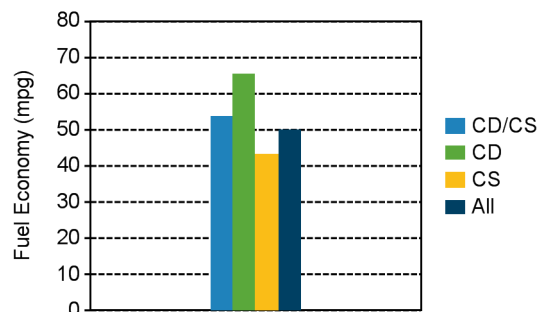
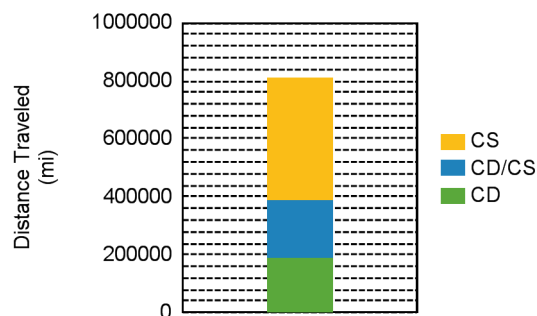
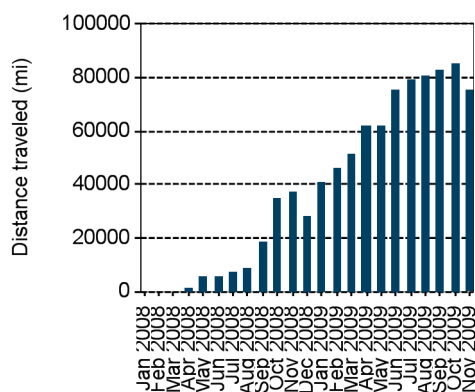
Overall gasoline fuel economy (mpg)	50
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	60
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	45
Total number of trips	88,028
Total distance traveled (mi)	807,790
Trips in Charge Depleting (CD) mode <sup>3</sup>	
Gasoline fuel economy (mpg)	65
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	141
Number of trips	41,208
Percent of trips city / highway	86% / 14%
Distance traveled (mi)	188,252
Percent of total distance traveled	23%
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes <sup>5</sup>	
Gasoline fuel economy (mpg)	54
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	50
Number of trips	8,042
Percent of trips city / highway	48% / 52%
Distance traveled (mi)	199,437
Percent of total distance traveled	25%
Trips in Charge Sustaining (CS) mode <sup>7</sup>	
Gasoline fuel economy (mpg)	44
Number of trips	38,778
Percent of trips city / highway	74% / 26%
Distance traveled (mi)	423,490
Percent of total distance traveled	52%
Number of trips when the plug-in battery pack was turned off by the vehicle operator <sup>8</sup>	1064
Distance traveled with plug-in battery pack turned off by the vehicle operator (mi) <sup>9</sup>	76,300

## Vehicle Technologies Program

Date range of data received:

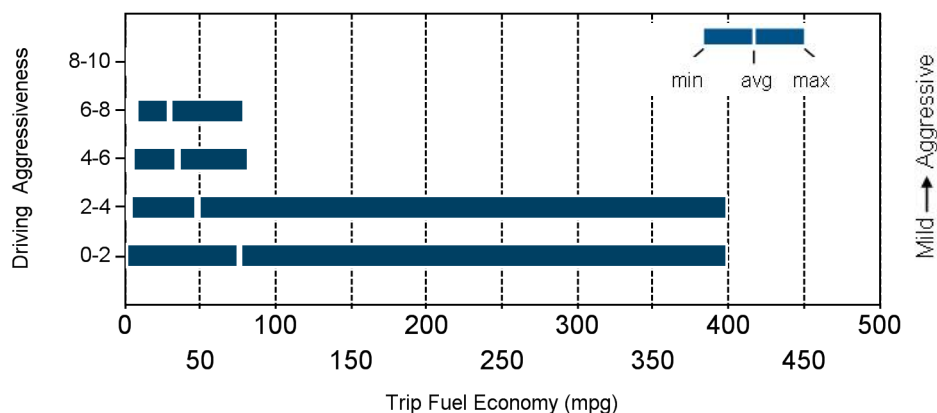
4/18/2008 to 10/31/2009

Number of days the vehicles were driven: 555

**Gasoline Fuel Economy By Trip Type**

**Distance Traveled By Trip Type**

**Miles Logged by Month This Year**

Notes: 1 - 9. Please see <http://avt.inel.gov/phev/reportnotes> for an explanation of all PHEV Fleet Testing Report notes.

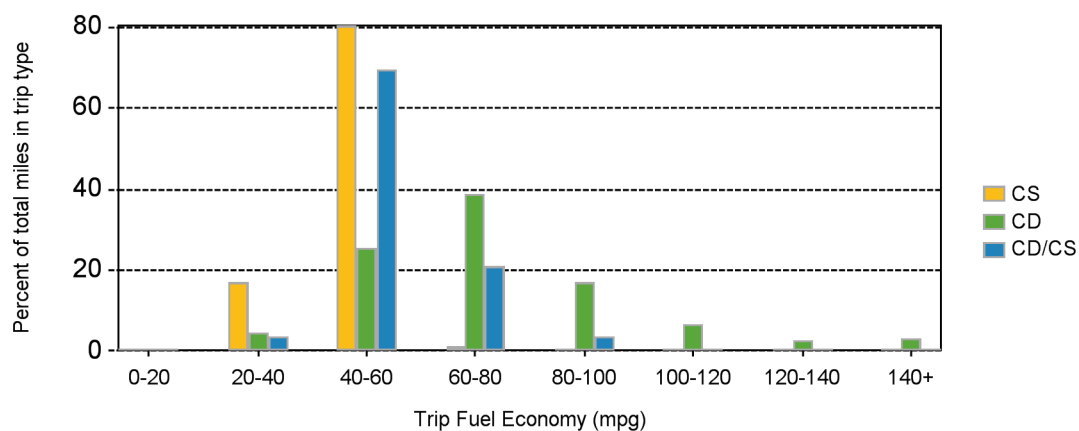
Trips in Charge Depleting (CD) mode			City	Highway
Gasoline fuel economy (mpg)			64	67
DC electrical energy consumption (DC Wh/mi)			168	108
Percent of miles with internal combustion engine off			31%	9%
Average trip aggressiveness (on scale 0 - 10)			1.6	1.6
Average trip distance (mi)			2.9	14.3
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes				
Gasoline fuel economy (mpg)			57	53
DC electrical energy consumption (DC Wh/mi)			83	43
Percent of miles with internal combustion engine off			24%	5%
Average trip aggressiveness (on scale 0 - 10)			1.8	1.5
Average trip distance (mi)			8.4	39.7
Trips in Charge Sustaining (CS) mode				
Gasoline fuel economy (mpg)			38	46
Percent of miles with internal combustion engine off			22%	4%
Average trip aggressiveness (on scale 0 - 10)			1.8	1.7
Average trip distance (mi)			3.7	31.0

**Effect Of Driving Aggressiveness on Fuel Economy This Year**



Aggressiveness factor is based on accelerator pedal position. The more time spent during a trip at higher accelerator pedal position, the higher the trip aggressiveness.

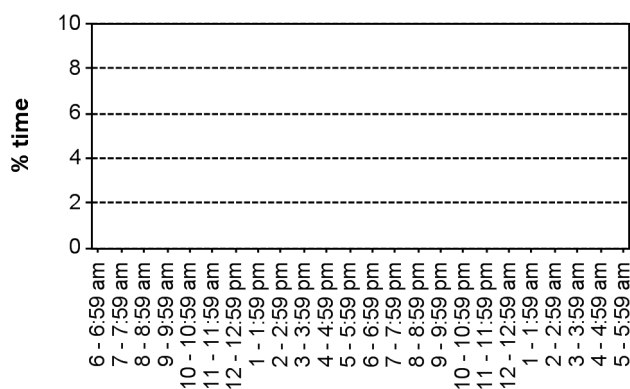
**Trip Fuel Economy Distribution By Trip Type**



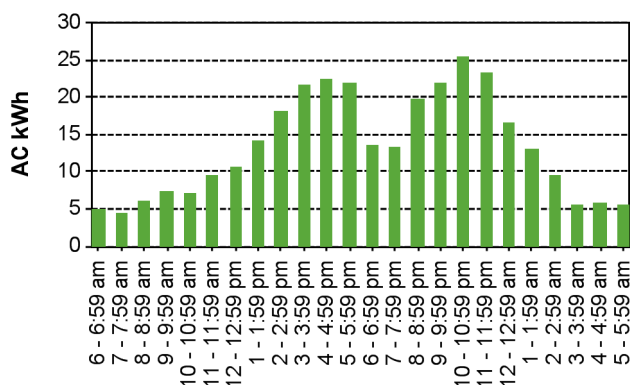
## Plug-in charging

Average number of charging events per vehicle per month when driven	16
Average number of charging events per vehicle per day when vehicle driven	1.1
Average distance driven between charging events (mi)	42.9
Average number of trips between charging events	4.7
Average time plugged in per charging event (hr)	19.6
Average time charging per charging event (hr)	2.9
Average energy per charging event (AC kWh)	2.6
Average charging energy per vehicle per month (AC kWh)	41.6
Total number of charging events	18,841
Total charging energy (AC kWh)	48,839

**Time of Day When Driving**



**Time of Day When Charging**



**Time of Day When Plugging In**

